BELLINGHAM OS9 (USERS GROUP)

Volume I No. 3

February 28, 1990

OS-9 MEETINS:

Meetings are held at 7:30 p.m., the second Thursday of each month in room 109 at Sehome High School.

BENEFITS TO MEMBERS: `

As a participating member of our new Bellingham OS9 Users Group you enjoy many benefits:

- 1. Newsletter
- 2. OS9 Bulletins
- 3. Public Domain Library
- 4. Technical help
- 5. Lectures and demonstrations

- 6. Periodic group purchases
- 7. Membership List
- 8. Access to GIMIX Level-III OS9

HELP WANTED!

Our group needs editorial volunteers. If you can contribute with information or helpful experiences of your own, please contact Rodger Alexander. The health of our newsletter depends on contributions made by many members of our group.

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COCO-4 K.Darling's response to "KMA" questions

TELECOM Software Reviews of PubDomain Terminal Software

RS-232 25pin to 9pin conversion

PD UTILITIES Our PD Library is being re-organized and

"legalized". Several disk are available now!

HOMEWORK Practice makes perfect!!!!!

CODE SHEETS Basic09 Commands and Error Codes

OS9 Error Codes

SUBSCRIPTION INFORMATION:

Newsletters are available free to those in attendance at the monthly meetings. If you would like to receive the newsletter in advance by mail a subscription rate of \$3 for 6 monthly issues or \$6 for 12 monthly issues is available.

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KMA

EDITOR'S NOTE: The following are responses by Kevin Darling to questions being asked about the development of the two current 68030 OS9 Computers that will be on display at the April Rainbowfest. Kevin is under contract by both Kenneth-Leigh Enterprises and Frank Hogg Laboratory, Inc. to write software for both machines. NOTE the advertizements in the March issue of the Rainbow on pages 25 and 39 regarding the new OS9 machines. \$

> I $\,$ was really disappointed to hear KLE $\,$ is sticking with $\,$ NTSC > rates...

Wait for a higher res card then. As a first step, NTSC/PAL will be great for those wishing to get into multimedia style applications. Also, only a few people own a multisync at this time. Affordability is paramount.

Tell you what tho: you could commission and pay for a run of hires boards (figure about \$2500 for the first ten) and go into biz as a 3td party. Seriously.

- > Does the Hogg board just replace the board in the COCO [123]?
- > Would be nice not to have to sacrifice my 3.

No, it goes in the K-bus. Give your CC-3 to the kids. Or use it as a terminal (someone REALLY needs—to do a nice 80x25—terminal CC-3 ROM!). The KLE has a different use for the CC-3; ask me later.

> I thought about it a bit after I posted, and I realized these two
> companies must have thought about this a million times...[AT bus]

You bet. Consider: the PT-68K has been available with a PC bus for years now. Did you buy one? Has the bus been used much? Nope and nope. Again tho, perhaps adapters will be made. But why saddle a 68K with an Intel cpu's bus in the meantime? Future machines (much much later) may go with NuBus, tho. Or maybe FutureBus. Hard to tell what will dominate yet.

> When will Frank Hogg have OSk windows available?

I'm doing a generic OSK windowing system for both machines. Will it be ready in time for the fest? Doubtful. But very soon thereafter. Patience. I like quality do-it-once-right stuff.

> What (if any) prospects are there of running OS9 Level II and OSk > simultaneously?

The architects are trying to leave all options open... so that various ideas in this like can be tried out. I'd say yes... with some restraints at first.

- > Does the 6309 board support the whole gamut of current VDG
- > graphics, etc? Will it be able to support more advanced graphics
- > cards as well?

Yes, it has a GIME onboard. No, you would add gfx cards to the K-bus later.

> After a few months, I wouldn't ever touch the 6309 side...

Basically, KLE is betting people will move over quickly. FHL is betting you want CC-3 compatability foremost. I think both bets have winners out there. It's not as black and white an issue as it seems, tho.

> Will this mean that software developers will have to develop TWO > separate software packages to run on just one brand of computer?

Not if they use the standard windowing calls/libraries. As I said, color manipulation may require some thinking ahead, tho. This is to be expected.

> Who seems further ahead in development?

Neither are, on the new hardware. The other K-bus stuff you could've bought for some time now (altho not all the boards listed have been made yet).

- > I don't know which way I'll go myself --
- > I know lots of folks who'll have to start cheap.

Yep. A third machine may show up also just to muddy the waters... one with a 68000/6809 combo with coco slots made just to be placed in a PC case with your current equipment. Sort of a really cheap OSK starter system, with no expansion (except perhaps 020 addon). We live in interesting times....

> Will there be docs that explain what memory address does > >
what/how?

Sure. How fancy, I do not know. May be in an extra cost tech manual. I'm sure I'll post some info here soon, tho what it do for you, I dunno. Theoretically, you don't need this info at all of course. But then there are lots a people like you and me who love that kind of stuff (grin).

> Will I have to buy OS-9/OSK from a different party?

See March 1990 Rainbow FHL ads on K-bus about that. The KLE should come with it.

> And will the Manuals be like the OS-9 Level II manual?

I suppose the manuals will be the MW OSK manuals, which are pretty good. Those suckers add to the cost some, btw. I think a set is \$75

retail from MW, for example!

> If it comes with a 3 1/4" drives, is there room for 5 1/4" > drives..

That was a point of debate. Some said "Heck let them run the cable over from their current 5" drive case if they need to". Others said "But that sounds like a CoCo setup - ugh!". So in the end, I think there'll be 5" drive space. A sad reality, as a lot of slick cases had to be dismissed.

> Will the disk read/write be in Coco format or Standard OS-9 > format?

I think current OSK drivers handle just about everything. Coco, ST, "standard", maybe even the new "universal format" (don't ask, it's weird). Hmmm, well maybe not the "standard" ones (single density first track).

- > Is there audio/video IN and OUT ports?
- > What is "genlock"ing?

The KLE has stereo audio In and Out. Only video-Out for now. Hopefully later, we'll also see video-In that can be overlaid by the KMA gfx.

> (ignore this stupid question) Is there a cassette port?

Okay, I'm ignoring the question <but shuddering at the thought>.

---- Kevin

SOFTWARE REVIEW:

TELECOMMUNICATIONS

Telecommunications deals with the transfer of data from one computer to another via telephone lines, much like teletype but of course much faster and with many advanced features available through commercial and private bulletin board services.

There are a lot of public domain telecommunication software packages for OS9 level-II, but little for level-I (due to limited memory). RS-DOS offers some excellent terminal programs for the CoCo-3 such as MikeyTerm, Greg-E-Term and Ultimaterm. however I will limit my review to only the OS9 packages.

OS-TERM (v2.0.8) is an excellent terminal package offering ASCII, XMODEM and YMODEM file transfer protacols, CONFERENCE mode, AUTO-DIAL directories, ECHO or LOG option, 10 MACROS with LEARNing options for AUTO LOGIN capability, plus REMOTE or BBS mode with password access even to the basic shell for remote operation of your computer.

TELSTAR (v3.2.4) is very impressive during initialization with flashing Title Screen, etc. It also has an AUTO-DIAL directory, XMODE and YMODEM file transfer protacols, CONFERENCE mode, LOG options, 10 MACROS, complete PARAMETER and LINE FEED configuration menus, and PRINTER echoing.

SUPERCOM (v1.01) Reminds me of MikeyTerm on RSDos, although it doesn't appear the same on the screen, the options available are very much alike. It has an AUTO-DIAL, OPTION or "parameter" window where you can set standard terminal configurations although BAUD RATES have their own separate window menu. BUFFER capture which is the same as ECHO or LOG options above. XMODEM is the only error checking download protacol available and although Supercom list TERMINAL TYPES, only OS9, ANSI and ASCII are available.

<u>JIMMYTERM</u> (v3.1) Is very versatile with "exploding" windows. It has both XMODEM and YMODEM error checking file transfer protacols as well as ASCII. Only 6 MACROS and no DIAL DIRECTORY. Buffer capture is available through the ECHO option and the Parameters menu includes Line Feed option plus the standard terminal setup options.

KBCOM (v1.0) This program is only a couple of months old with a commercial version set for release from Second City Software in mid 1990. KBCOM offers a GRAB screen or Snapshot option plus ECHO to disk or device (/p). PARAMETERS menus provides configuration menus for RS-232, Windows, Terminal and Drive/Directory options. All keys can be programmable "hot keys"/macros and true VT100 terminal emulation is available. Unfortunately no AUTO-DIAL option.

WIZPRO I do have WizPro, but have not been able to get it up and running. However I have seen it in operation and am very impressed with it's ability to AUTO-LOGIN, COCOBIN error checking protacol that provides automatic file transfer operation. A commercial version of the program is available with even greater enhancements.

My overall preference is WIZPRO and OSTERM in that order.

HOMEWORK

At the February meeting we reviewed our first "homework" assignment and checked to see if everything worked OK. Craig Dubois discovered a problem doing a listing to the screen of MYDIR after the instructions told him to CHD /DO. But Craig used the full path name </DO/MYDIR> and solved the problem on his own! Congratulations Craig!!!!

This month we are going to take it easy and use what we have already learned and play around with the EDIT commands.

If you completed last months lesson you have a Directory on your

disk called MYDIR which contains a file called "Lesson1". This is a text file that contains the first 10 instructions from last months homework assignment. If you completed the extra credit assignment you also have a second text file called "Lesson1B" that contains the instructions 11 through 18 from last months homework assignment.

Now that we have that all cleared up, lets get started with this months set of instructions:

- 1. Enter RENAME /DO/MYDIR /DO/HOMEWORK
- Enter DEL /DO/MYDIR
- 3. Enter DIR /DO/HOMEWORK
- NOTE: Since are <u>Present Working Directory</u> is /D0, we can save some typing strokes by leaving out "/D0/" in the above commands.

Examples: RENAME MYDIR HOMEWORK

DEL MYDIR DIR HOMEWORK

- 4. Enter CHD /DO/HOMEWORK --or-- Enter CHD HOMEWORK
- 5. Enter BUILD Lesson2

 Again notice that the filename is in lowercase to distinguish it from a Directory name.
- 6. At the "?" prompt, type in instructions 1 through 5.
- 7. Enter (ENTER) (Press the Enter Key only)
- 8. Enter EDIT /DO/HOMEWORK --or-- Enter EDIT HOMEWORK
 We're now going to play around with the Microware
 Macro Editor that comes with OS9
- 9. At the "E:" prompt Enter L*

 This should give you a complete listing of the 5 command lines you type in.
- 10. At the "E:" prompt Enter d

 This should list the 1st command and delete the line
- 11. At the "E:" prompt Enter RENAME MYDIR HOMEWORK
- 12. At the "E:" prompt Enter L

 This should list command number 2
- 13. At the "E:" prompt Enter C./DO/MYDIR.MYDIR.

 The "C" is an editor command meaning "Change"

 The periods "." are deliminators (space indicators to the editor) to separate parts of the command line.

 You are telling the editor to "C"hange "/DO/MYDIR" to

"MYDIR" resulting in the deletion of "/DO/"

- 14. At the "E:" prompt Enter L (to verify our deletion)
- 15. At the "E:" prompt Enter <ENTER> (Press the ENTER key)
 The 3rd command should now list out.
- 16. At the "E:" prompt Enter C./DO/HOMEWORK.HOMEWORK.

 Enter L_(to verify our deletion)
- 17. At the "E:" prompt Enter <ENTER> to advance to line 4.
- 18. Now delete the "/D0/" from command 4. Enter L (for "L"ist) (to verify our deletion)
- 19. At the "E:" prompt Enter Q (to Quit EDITor)

SUMMARY:

In this lesson we renamed our original directory MYDIR to HOMEWORK and created another text file with the BUILD utility called Lesson2. We also made use of the EDIT command to modify our original Lesson2 text file deleting references to "/DO/" since we don't really need the full pathname in the sample command lines.

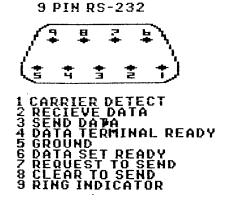
BONUS!!!!!!

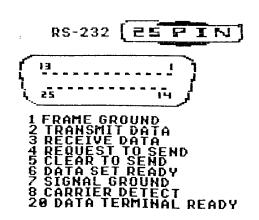
Enter DIR at the OS9 prompt.
Enter <CTRL> A (Hold the CTRL key down while pressing "A")

For those in attendance at the meeting, a public domain text editor will be available to make text entries and editing much easier. The PD text editor will operate on both Level-I and Level-II OS9.

RS-232

The serial I/O (Input/Output) port on computers comes in three styles. The RS-232 (BitBanger) port on the back of a CoCo has only four pins while the standard RS-232 ports usually have 9 or 25 pins. Craig DuBois has supplied us with a pin-out picture of the two standard ports. This information is important when trying to make cables to connect between the two different types of jacks.





BASIC09

EDITOR and SYSTEM Commands

EDITOR:

```
= Move to next line
+* = Move to end of listing
   = Move back one
-* = Move back to beginning
   = Renumber line
r* = Renumber all lines (default=100,10)
   = List line
l* = List all lines
   = Search for string
s* = Search for all occurrences
   = Delete line
d
d* = Delete all lines
   = Change string
C
c* = Change all occurrences
```

SYSTEM:

q

= Quit

```
$ = OS9 port ($dir /d1/cmds)
BYE = Exit BasicO9
CHD = Change Directory
CHX = Change Execution Directory
DIR = Directory listing
EDIT= Puts BasicO9 into Edit mode
KILL= Deletes procedure from memory
LIST= List procedure (program)
LOAD= Loads program from disk
MEM = Displays workspace memory
PACK= Compiles basic listing to I-Code
RENAME= Rename file in memory
RUN = Executes basic program in memory
SAVE= Saves program from memory to disk
SAVE*=Saves all programs in memory to disk
```

SAMPLE PROGRAM:

```
Always enter programs in Lower Case

E:(SPACE)100 print "BASICO9 IS GREAT";(RETURN)

*
E:(SPACE)110 goto 100

*
E:q
```

```
33 - Illegal window type
                                                   238 - Unknown Process ID
34 - Window already defined
                                                   239 - No task number available
5 - Font Not found
                                                   240 - Unit Error
                                                   241 - Sector Error
'o - Stack Overflow
37 - Illegal Argument
                                                   242 - Write Protect
243 - CRC Error
38 - unused
                                                  244 - Read Error
245 - Write Error
39 - Illegal Coordinates
70 - Internal Integrity check
                                                  246 - Not Ready
247 - Seek Error
71 - Buffer size is too small
2 - Illegal Command
93 - Screen or Window Table is Full
                                                   248 - Media Full
94 - Bad/Undefined buffer number
                                                   249 - Wrong Type
75 - Illegal window definition
                                                   250 - Device Busy
P6 - Window undefined
                                                   251 - Disk ID Change
:7 - unused
                                                   252 - Record is locked-out
                                                   253 - Non-sharable file busy
254 - I/O Deadlock Error
98 – unused
79 - unused
                                                    1 -- Unconditional Abort
2 -- Keyboard Abort
00 - Fath Table Full
01 - Illegal Path Number
02 - Interrupt Folling Table Full
                                                    3 -- Keyboard Interrupt
03 - Illegal Mode
                                                   10 -- Unrecognized Symbol
04 - Device Table Full
05 - Illegal Module Header
                                                   11 -- Excessive Verbage
                                                   12 -- Illegal Statement Construction
5 - Module Directory Full
7 - Memory Full
                                                   13 -- I-code Overflow
                                                   14 -- Illegal Channel Reference
                                                   15 -- Illegal Mode (read/write/update)
⊃8 - Illegal Service Request
9 - Module Busy
                                                   16 -- Illegal Number
0 - Boundary Error
                                                   17 -- Illegal Frefix
1 - End of File
12 - Returning non-allocated memory
                                                   18 -- Illegal Operand
19 -- Illegal Operator
13 - Non-existing Segment
14 - No Permission
                                                   20 -- Illegal Record Field Name
21 -- Illegal Dimension
                                                    22 -- Illegal Literal
15 - Bad Path Name
16 - Fath Name Not Found
                                                   23 -- Illegal Relational
17 - Segment List Full
                                                    24 -- Illegal Type Suffix
18 - File Already Exists
                                                    25 -- Too-large Dimension
                                                    26 -- Too-large Line Number
19 - Illegal Block Address
20 - Phone Hangup-Data Carrier Detect
                                                    27 -- Missing Assignment Statement
                                                    28 -- Missing Path Number
      lost
21 - Module Not Found
23 - Suicide Attempt
24 - Illegal Process Number
                                                    29 -- Missing Comma
                                                    30 -- Missing Dimension
                                                    31 -- Missing DO Statement
26 - No Children
27 - Illegal SWI Code
                                                    32 -- Memory Full
                                                   33 -- Missing GOTO
34 -- Missing Left Parenthesis
28 - Process Aborted
                                                   35 -- Missing Line Reference
36 -- Missing Operand
19 - Process Table Full
19 - Process Table Full
100 - Illegal Parameter Area
101 - Known module
102 - Incorrect Module CRC
103 - Signal Error
104 - Non-existent Module
105 - Bad Name
                                                    37 -- Missing Right Farenthesis
38 -- Missing THEN statement
                                                    39 -- Missing TO
40 -- Missing Variable Reference
                                                   41 -- No Ending Guote
42 -- Too Many Subscripts
43 -- Unknown Procedure
36 - Bad Module Header
7 - RAM Full
```

```
44 -- Multiply-defined Procedure
45 -- Divide by Zero
46 -- Operand Type Mismatch
47 -- String Stack Overflow
48 -- Unimplemented Routine
49 -- Undefined Variable
50 -- Floating Overflow
51 -- Line with Compiler Error
52 -- Value out of Range for Destina-
       tion
53 -- Subroutine Stack Overflow
54 -- Subroutine Stack Under flow
55 -- Subscript out of Range
56 -- Parameter Error
57 -- System Stack Overflow
58 -- I/O Type Mismatch
59 -- I/O Numeric Input Format Bad
60 -- I/O Conversion: Number out of
       Range
61 -- Illegal Input Format
62 -- I/O Format Repeat Error
63 -- I/O Format Syntax Error
 64 -- Illegal Path Number
65 -- Wrong Number of Subscripts
 66 -- Non-record-type Operand
67 -- Illegal Argument
 68 -- Illegal Control Structure
 69 -- Unmatched Control Structure
 70 -- Illegal FOR Variable
 71 -- Illegal Expression Type
 72 -- Illegal Declarative Statement
73 -- Array Size Overflow
 74 -- Undefined Line Number
 75 -- Multiply-defined Line Number
 76 -- Multiply-defined Variable
 77 -- Illegal Input Variable
 78 -- Seek Out of Range
 79 -- Missing Data Statement
```

Bellingham OS9 Users Group

|February 27, 1990 Public Domain Utilities Disk 1

DEARC

Usage : Dearchives IBM/PC "ARCed" files from within OS9

MODUTIL

: Collection of enhanced standard OS9 utilities Usage

(mbackup, mdate, mdump, mformat, mmakdir, mmfree, pmode

rep, split, unuse, verm, mxmode)

RSDOS

Usage : File transfer utility from Radio shack Dos format to OS9

Syntax : RSDOS [-cmds {modifier}] dev_name [RSDOS_file] [OS9_path]

Command : (One required)

-dir for a directory listing of an RSDOS diskette

-get to import a file from an RSDos diskette -del to delete a file from an RSDos diskette -put to export a file to an RSDos diskette

Modifer : (optional)

-b for type O:Basic binary type program

-d for type1: Basic data file

-m for type2: executable machine language program

-t for type3: text editor source file -a for ASCII format (default is BINARY) -f=n sets the file type to n (n = 0 to 255)

SDIR

: Super Directory to enhance/replace standard DIR utility Usage

: SDir [-opts] [dirname! pathname] [-opts] Syntax

-d = flags files which are directory files

-e = display "entire" description for each file

-f = display "full" description for each file (fstat)

-s = display files in bytes and sectors

-x = displays execution directory

-c = performs case sensitive pattern matching

AMPUTATE

: Forces the term call of the cache device driver returning Usage

memory to the system and delete all files on the device.

Syntax : Amputate [/]dev_name [[/]dev_name ..]

DISLEX

Usage : List utility that displays words in reverse order

PALETTE

Usage : Change scree/window palette (color) on the fly

Syntax : Palette [-d (device-window)] [<palette register><value>..]

WATTR

Usage : Wildcard ATTRibute utility

Syntax : Wattr *.c pe e Wattr pascal? pe e

AR

Usage : OS9 Archiving utility

: Ar -<cmd> [<modifer>] [file..] Syntax

Commands : -t show table of contents for archive

-u update/add files(s) to the archive

-p print file(s) from the archive

-x extract file(s) from the archive

```
Modifer : -a all versions (for extract)
          -s supress file compression
          -z read names for <cmd> from std in
DLS
Usage
        : Directory utility
Syntax
        : Dls [-opts] [path/path] [-opts]
Options :
             -x use current exec dir
             -s one entry/line (necessary for "call" utility)
             -e extended directory (dir e)
             -d only directory files
             -f only non-dir files
             -? help message
Pattern : may include wild cards
             * multiple character
             ? single character
PCDOS
Usage
        : File transfer utility from PC format to OS9
        : PCDos [-cmds {modifier}] dev_name [DOS_path] [OS9_path]
Commands : (one required)
             -dir for a directory listing of a DOS diskette
             -get to import a file from a DOS diskette
             -del to delete a file from a DOS diskette
             -put to export a file to a DOS diskette
Modifier : (optional)
                   transfer file as is (with -get/-put)
             -raw
                   Without -raw, transfer of a text file assumed
             -all for hidden and system files revealed(with -dir)
WCONFIG
Usage
         : Window configuration utility
Syntax
         : wconfig STX CPX CPY SZX SZY PRN1 PRN2 PRN3
BCOLOR
Usage
        : Change background color: Bcolor <color>
FCOLOR
        : Change foreground color: Fcolor (color)
Usage
BORDER
Usage : Change border color: Border <color>
EATLE
        : Deletes Line Feeds from downloaded files
Usage
         : Eatlf <file-in >file-out
Syntax
PRINTHELP
Usage : Prints SYS/helpmsq to screen/printer
WCOPY
Usage
       : Wildcard copy utility
Syntax : WCopy *.* /d1/cmds
           (WCopy <Stdin (filename(*(?)))> <StdOut Dir>
GTIP
Usage
       : Disk zap utility (self prompting) 80 column
Syntax : Qtip <file_path_name>
WDEL.
Usage
        : Wildcard Delete utility
Syntax
        : WDel *.* WDel <filename+(wildcard */?)>
```

BRUWEE : Text viewer utility with paging & up/down scroll Usage RESET : Keyboard "cold start" Usage WDIR : Wildcard Directory Utility "WDir /d1/cmds/w*" Usage CALL Usace : Calls commands repeatedly. : Call (-x) [command list] Syntax Options : -x = removes extensions from input firstExample : fls !call attr \$ pe ! shell -t (fls or ls or dls = dir utilities with single col. listing to stdout.) dls -s !call -x asm \$.a -o=\$.o !shell t dls -s !call copy \$ /dd/\$!shell t IPATCH Usage : Creates a new file from an Orig_file and Fatch_file (Patch_file created by MAKPATCH utility) : IPatch <Original_file> <Patch_file> <New_File> Syntax SORTDIR : Sorts directory entries in ASCII order Usage : Sortdir <dirname> [...] Syntax WMODE : Returns status of current window Usage Syntax : Wmode <cmds> <options> Options : blank - returns current screen attributes -? - Displays commands and options list -r - Restores original window attributes - Saves current window attributes -f<reg>Change foreground register to <reg> -b<reg>Change background register to <reg> -e<req>Change border register to <reg> -p<reg><col> Change palette <reg> color to <col> CLEARD Usace : Deletes all files from directory Syntax : Cleard /d1/TEXT LABEL : Renames the Disk Name/Label (self prompting) Usage STRIP : Strip or Add Character (line feed, carriage returns) Usage : Strip [opt] <{oldfile} >{newfile} Syntax -c = Strip carriage returns fromom input Options -1 = Strip linefeeds from input +l = Adds linefeeds after each carriage return +b = Process backsapce characters +d = Display stripped characters to error output ZAP : Disk zap utility. Must be in 80 column mode Usage

: Zap </drive> Syntax

Enter "Alt-H" for listing of command options

COCOPR

: ASCII text formatter to standard printer output Usage

Syntax : CoCoPR (file_path_name)

```
: Unix type Directory Utility
Usage
Syntax : LS [-options] [pathname]
Options :
              -? = Shows HELP
              -s = Flag directory files with "*"
              -d = Display subdirectories (overrides "S")
              -e = Display extended directory
              -1 = (same as -e)
              -n = Narrow directory
              -p = Pipe mode on output
SYSINFO
Usage
         : Complete status report of current window including
           current palette colors.
CONVERT
       : Converts decimal to hexidecimal numbers (visa versa):
Usage
MAKPATCH
      : Created patch file for use with IPATCH
Usage
TREE
         : Directory utility that list hierchical listing of
Usage
           all directories, files, subdirectories, files.
DIRSORT
Usage : Sorts current/default direcoty
PAK
Usage
        : File Archive utility
Syntax
         : pak <-opt> <pakfile> [file list ....up to 40]
              a = Add a file to PAK
Options :
              m = Move a file to PAK
              u = Update file to FAK
              er= Remove file(s) from PAK
              dt= Test integrity of files in PAK
              b = Build/kee Backup (.BAK) version
              s = Suppress all compression
UTIL3
Usage
         : Merged utilities file: PROC, DIRM, MMAP, PMAP, SMAP,
                                  DMEM, FATHS, DDIR, IDIR
COPY
        : Updated PD version of standard Copy utility
Usage
        : Copy [-opts] <{pathname}{filename}> <filename>
Options :
              -s = single drive
              -r = auto rewrite
              -v = verify file integrity
              -x = uses current execution directory for source
              -? = help
              () = optional, if omitted defaults to source filename
DIR
Usage
         : Updated PD version of standard Dir utility
Syntax
         : Dir [-opt] {directory pathname} [-opts]
Options :
              -e = Extended directory listing
              -x = Execution directory listing
            · -s = Sorted listing, alpha numberic order
              -u = Unformated listing
              -w = Re-write sorted Directory
              -? = Help
```

こりに

Purge : Deletes file(s) from a directory Usage Syntax : Purge (directory pathname) self prompting DASM : Disassembler for Level-I ASM and Level-II RMA files Usage Syntax : DASM <filename> Options : Prompted options: Examples (d,p,s,q,a,l,c,m,f,q) DASM> d = disassemble to the console p = disassemble to a file in the display format s = disassemble to a file in source code format g = generate labels for the current lines a = search for sequences of three or more ascii charc l = goto label maintenance prompt c = goto control maintenance prompt m = goto comment maintenance prompt f = goto load/save prompt q = (quit) EXIT DASM

DISKOPT

Usage : Graphics DCHECK Utility (Self Prompting)

Bellingham OS9 Users Group

Y ------

February 27, 1990 Public Domain Utilities Disk 2 |

CC3DISK

Usage : Modified CC3Disk permits drive descriptor

modifications using RSDOS and FCDOS (similar to

SDisk)

MORSE

Usage : Reads data from standard in until EOF and converts

data to Morse Code audio tones.

Syntax : Morse [-opt] < input

Options : e = echos data to standard out

i = interrupts remain enabled

s = space between characters (default s=1, max=255)

Misc : The "<" character lowers Morse speed

The ">" character raises Morse speed

SDIR

Usage : Unix "LS" type 'Super Directory' utility

Syntax : SDir [-opts] <dirname: pathname > [-opts]

Options : e = extended listing

x = execution directory

d = flag directories with (D)

f = full or "fstat" type display

s = list filenames and file size in single column

c = case sensitive switch-on for file matching

? = help message

SHELL21

Usage : OS9UsergGroups expanded "shell" module for OS9

Permits OS9 prompt modification, Wildcards, Faths, Variable Prompting, GOTO-IF-AND-THEN-TRUE-FALSE Arg-

uments and much more.

SCRIPT

Usage : Script files for use with Shell+

ULDIR

Usage : Converts files and directory names to proper case

(Upper/Lower)

CRC

Usage : turns off the CRC check routine in OS9p1

Syntax : CRC OFF <-OR-> CRC ON

MROFF

Usage : Text formater using Word Star (ScreenStar) (DynaStar)

DOT "." formatting commands

Example: ".ju" turns on justification

HDKIT

Usage : Peter Lyall's Hard Drive Backup/Restore Utility

REBACK

Usage : BasicO9 enhancements for Peter Lyall's HDKit Utility.

BOOTSPLIT

Usage : Separates merged modules into individual files

(Similar to D.P.Johnson's MODBUSTER

```
CC2
```

: Executive routine for microware C.Compiler on CoCo3 Usage

: Single column (non-alphabetized) directory utility Usage ·

DEMODE

Usade : DEviceMODE utility to change disk drive parameters

Syntax : DEMODE </device> [opts]

Options : STF = stepping rate

TYP = typeDNS = densityCYL = cylindersSID = sidesVFY = verifySCT = sectors

TOS =

ILV = interleave

SAS =

DMODE

Usage : DeviceMODE utility to change disk drive parameters
Syntax : DMODE </device > [opts]

Options : tracks, sides, step, tpi (tracks/inch)

DIRCORY

Usage : Copies files from one directory to another

Syntax : DirCopy /d0/sys /d1/sys [opt] Options : C = Confirm copying of all files

D = Enable the copying of all sub-directory files

I = Interactive mode

R = Automatic overwrite of existing files

S = Sorted Directory

T = Replace outdated to_path files

U = Update to_path file owners's number and date

PRINT

Usage : Formated I/O listing to printer device

Syntax : Print [+/-opts] <filename>

Options : +/-H = Header

+/-D = Date+/-T = Time

+/-P = Page numbering

+V = Verbose Х = Stdin

= Page Length L. Ы = Page Width M = Margin Width N = Heading Name

PRINTERR

: Level-II version of miciroware's PRINTERR. Prints Usace

corresponding error message from /dd/sys/errmsg file

NOTES : Recommended that FRINTERR be included in the OS9Boot file and then the loaded again into memory as part of the "startup" file. PRINTERR will then respond

automatically when an error is incurred.

PRINTHELP

Usage : Utility to print help message file to screen/printer

SEPARATE

Usage : Separates merged modules into individual files

(Similar to D.P. Johnson's MODBUSTER